Mx-Suite™
Embedded Software Test Environment

A comprehensive test tool that offers:

- Time savings through naturally understood graphical test cases & results
- Reduced costs through automation and reusable test cases over your product life cycle
- Assured quality through documented quality evidence of conformance with OEM requirements and standards
- Rigor to your development process by ensuring measurable pass-fail criteria are defined for requirements
Danlaw’s Mx-Suite is an industry-proven software for verification and validation (V&V) that runs on a Windows® PC. It is used to test simulation models, software code (developer-written or auto-generated), and vehicle electronics. With its powerful behavior diagrams, test cases are specified in terms of inputs, expected outputs, and tolerances.

Mx-Suite can record data from experiments or import field data as acceptance criteria. Test your development concepts using virtual prototypes, well before electronics are available. Danlaw offers professional services for custom interfaces to take the frustration out of developing custom interfaces.

Mx-Suite Areas of Application

- Develop recognizable pass/fail criteria during requirement analysis and modeling
- Perform early tests on your design concepts and proceed throughout development
- Prove function and structural coverage met requirements during implementation
- Completely test software on target ECU
- Test whitebox, blackbox, unit, subsystems, and perform formal design verification & production validation
- Execute network conformance tests
- Seamlessly integrate with your enterprise ALM system
Universal Connectivity

Mx-Suite™ provides a unique approach that allows it to connect any implementation. Connector Transforms are a feature provided by Mx-Suite which transforms the native signal interface of the system under test (SUT) to a form understood by Mx-Suite.

In other words Mx-Suite speaks the same language as your implementation. Connector transforms are provided in a standard library, and Mx-Suite even allows developers to write their own transforms.

Mx-Suite interacts with enterprise application life-cycle management tools, such as requirements management and quality management tools.

Mx-Suite also connects to implementations, such as simulations models, software source code, IDEs, bench testers, and hardware in loop tester equipment.
Mx-Suite™ AUTOSAR® Component Testing

Mx-Suite™ helps you fully test your AUTOSAR software components quickly and efficiently with little to no programming experience. It performs functional testing of a SWC and generates easy-to-read reports and is usable throughout the design lifecycle. Your SWC is automatically harnessed and executed in a simulated SBW/RTE environment.

Mx-Suite also provides other important values to the tester:

- Support for MCAL and CDD Testing as you integrate the SWC with electronics
- Equivalency testing for pre/post AUTOSAR SWC allowing validation of the conversion
- Ability to simulate return errors from the SWC during subsystem testing so you don’t have to change tests or debug at the VFB level

ISO-26262 Safety Certification

Mx-Suite supports functional safety assessments for automotive clients and provides an easy way to generate test plans and test artifacts for ASIL A, B, C, and D requirements. Function, Branch, and Decision coverage is provided by Mx-Suite as an option and can be used for ASIL A and ASIL B applications.

Measurement coverage/decision coverage is provided by Mx-Suite through an integration with Rapita Systems Rapicover and can be used for ASIL C and ASIL D applications.